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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,938	05/31/2001	Michael R. Lynch	4667.P005	3283
	7590 01/22/200 KOLOFF TAYLOR &	EXAMINER		
12400 WILSHIRE BOULEVARD SEVENTH FLOOR LOS ANGELES, CA 90025-1030			WONG, LESLIE	
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			2164	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
Office Action Comments	09/872,938	LYNCH ET AL.				
Office Action Summary	Examiner	Art Unit				
	Leslie Wong	2164				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 13 No	Responsive to communication(s) filed on 13 November 2006.					
2a) This action is <b>FINAL</b> . 2b) ☑ This	action is non-final.					
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) <u>1-43</u> is/are pending in the application.	4)⊠ Claim(s) 1-43 is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-43</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>05/31/2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.						
<ul> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> </ul>						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Motice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date  5) Notice of Informal Patent Application					
<ol> <li>Information Disclosure Statement(s) (PTO/SB/08)</li> <li>Paper No(s)/Mail Date <u>11/13/2006</u>.</li> </ol>	6) ☐ Other:	асель Аррисацоп				

### **DETAILED ACTION**

#### Information Disclosure Statement

1. Applicants' Information Disclosure Statement, filed 13 November 2006, has been received, entered into the record, and considered. See attached form PTO-1449.

### Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: claim 39, line 2 recites "machine-readable media" is not supported in Applicant's Specification. Applicant may replace the "machine-readable media" with "computer-readable storage medium" as specify on page 10, paragraph 23 of the Specification.

## Claim Rejections - 35 USC § 101

3. Claims 24-28 and 35-43 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claim raises a question as to whether the claim is directed merely to an environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C 101.

Claims 24-26 and 35-38 are Apparatus claims. The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material per se.

It is suggested that the above claims be amended to include hardward components such as a processor or memory to put the claims in the statutory category.

Claim 27-28 and 39-43 are article of manufacture claims, the claims recite "...

when executed by a machine" is not acceptable as "when" may not actually going to happen at all. As such, the claims would not be able to perform the step of executing instructions to produce a ranked list of documents and the links to related documents as claimed. Hence, the claims are not statutory because they don't provide a tangible result.

To overcome the above rejection, the word "when" should be removed from the claimed limitations.

To expedite a complete examination of the instant application the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four categories of invention.

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### Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 1-5, 7-9, 13-17, 19-30, 35-36, are 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wheeler et al.** ("Wheeler") (U.S. Patent 6,618,727 B1) in view of **Chakrabarti et al.** ("**Chakrabarti**") (U.S. Patent US 6356899 B1).

Regarding claims 1, 13, 21, 24, and 27, **Wheeler** teaches method, apparatus, and article or manufacture, comprising:

- a). extensible markup language document, the first representation including a set of terms and one or more weighted values associated with each term in the set of terms (col. 2, lines 36-47; col. 7, lines 56-65; col. 20, lines 36-47 and Fig. 25);
- b). generating a linked to each of the one or more related documents (col. 2, lines 21-26).

Wheeler does not explicitly teach generating a list of one or more related documents ranked based upon relevance to a first representation of content.

Chakrabarti, however, teaches 'generating a list of one or more related documents ranked based upon relevance to a first representation of content associated with a first field of a reference' as where a search had been previously conducted, the user is presented with authority list 180 and hub list 182, for the frame collected with the use of prior searches and associated queries... the titles of the pages previously collected ranked by authority weighted and hub weight, respectively. In the case where the user finds the page population for the selected frame to be unacceptable, the user can modify the selected frame's attributes in order to generate a new search query and retrieve a new collection of pages (col. 23, lines 50-61; col. 24, lines 43-49; col. 28, lines 50-54; Abstract, Fig. 8)

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because

Chakrabarti's teaching would have allowed Wheeler's to improve the quality of results returned to users by calculating the overall document relevance to provide a ranking system that performs a ranking based on relevance as determined by improved,

automated computation of the link structure between information elements (col. 11, lines 47-52).

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Wheeler does not explicitly teach wherein the link points to a relevant field within each of the one or more related document.

Chakrabarti, however, teaches 'wherein the link points to a relevant field within each of the one or more related document' as Fig. 8 shows, pages 302, 306, and 310 of the initial set each include *highlighted* blocks generally designated 356 representing occurrences of one or more of the search query terms (i.e., relevant field)(col. 27, lines 60-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because Chakrabarti's teaching would have allowed Wheeler's to facilitate identification of information elements concerning the particular desired subject matter by highlighting the relevant query terms in the related document as suggested by at col. 2, lines 50-53 and col. 27 clines 60-65.

Regarding claims 2 and 3, Wheeler further teaches wherein the first field in the reference extensible markup language document is specified at the time a query is generated (col. 2, lines 42-44).

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Regarding claims 4 and 14, **Wheeler** further teaches wherein the reference extensible markup language document is selected form a group of documents in a database (i.e. source database) (col. 2, lines 39-42).

Regarding claim 5, **Wheeler** further teaches wherein submitting the reference extensible markup language document to an engine for analysis (col. 9, lines 52-65).

Regarding claim 6, **Wheeler** does not explicitly teach wherein the link is a hypertext link.

Chakrabarti, however, teaches wherein the link is a hypertext link (col. 6, lines 26-30).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because

Chakrabarti's teaching would have allowed Wheeler's to easily and conveniently access to desired documents.

Regarding claim 7, **Wheeler** further teaches wherein the second field of the related document contains semantically similar content to the content associated with the first field of the reference extensible markup language document (col. 11, lines 10-18).

Regarding claims 8, 20, 28, and 41, **Wheeler** further teaches executing a query on the reference extensible markup language document to generate the list and the link without a user having to request the query (col. 19, lines 60-64 and Fig. 24).

Regarding claim 9, **Wheeler** further teaches wherein the list further includes references to relevant fields within each related document (Fig. 21G).

Regarding claim 15, **Wheeler** further teaches a database containing a plurality of representations, each representation being associated with content in a particular field in an extensible markup language document (Fig. 24 and col. 19, lines 60-65).

Regarding claim 16, **Wheeler** further teaches wherein the engine adjusts the one or more weighted values for each particular term in the set of terms by a comparison to a historical weighted value associated with each particular term in the set of terms (col. 12, line 60- col. 13, line 8).

Regarding claim 17, **Wheeler** further teaches a converter to convert a non-extensible markup language document into an extensible markup language format (col. 9, lines 56-65).

Regarding claim 19, **Wheeler** further teaches wherein the engine has a module to compare the first representation to a plurality of representations in a database in

order to identify documents that are most similar to the first representation (Figs. 24 and 25; col. 19, lines 60-65; col. 20, lines 36-47).

Regarding claims 22 and 25, **Wheeler** further teaches wherein the reference extensible markup language document has a first extensible markup language schema, and a first related extensible markup language document has a second extensible markup language schema (col. 9, lines 56-65).

Regarding claims 23 and 26, Wheeler further teaches the steps of:

- a). identifying a first representation of content associated with the reference extensible markup language document, the first representation including a fist set of terms and one or more weighted values associated with each term in the first set of terms (i.e., suspect's height weight 50%) (col. 11, lines 55-63);
- b). identifying a second representation of content associated with a second field in a fist related extensible markup language document, the second representation including a second set of terms and a second weighted value associated with each term in the second set of terms (i.e., suspect's weight and hair color weight 25%)(col. 11, lines 55-63).

Regarding claims 29, 30, 35, 36, 39, and 40, **Wheeler** teaches a method, comprising:

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a). executing a query on content from a active desktop window without a user having to request the query (col. 19, lines 60-64 and Fig. 24).

- c). generating links to the documents (col. 2, lines 21-26).
- b). Wheeler does not explicitly teach generating a ranked list of documents related to the content based on the content in the active desktop window.

Chakrabarti, however, teaches 'generating a ranked list of documents related to the content based on the content in the active desktop window' as where a search had been previously conducted, the user is presented with authority list 180 and hub list 182, for the frame collected with the use of prior searches and associated queries... the titles of the pages previously collected ranked by authority weighted and hub weight, respectively. In the case where the user finds the page population for the selected frame to be unacceptable, the user can modify the selected frame's attributes in order to generate a new search query and retrieve a new collection of pages (col. 23, lines 50-61; col. 24, lines 43-49; col. 28, lines 50-54; Abstract, Fig. 8)

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Chakrabarti's** teaching would have allowed **Wheeler's** to improve the quality of results returned to users by calculating the overall document relevance to provide a ranking system that performs a ranking based on relevance as determined by improved, automated computation of the link structure between information elements (col. 11, lines 47-52).

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Wheeler does not explicitly teach wherein the link points to a relevant field within each of the one or more related document.

Chakrabarti, however, teaches 'wherein the link points to a relevant field within each of the one or more related document' as Fig. 8 shows, pages 302, 306, and 310 of the initial set each include <u>highlighted</u> blocks generally designated 356 representing <u>occurrences</u> of one or more of the search <u>query terms</u> (i.e., relevant field)(col. 27, lines 60-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Chakrabarti's** teaching would have allowed **Wheeler's** to facilitate identification of information elements concerning the particular desired subject matter by highlighting the relevant query terms in the related document as suggested by at col. 2, lines 50-53 and col. 27 clines 60-65.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Wheeler et al.** ("Wheeler") (U.S. Patent 6,618,727 B1) in view of **Chakrabarti et al.** ("**Chakrabarti**") (U.S. Patent US 6356899 B1) as applied to claims 1-5, 7-9, 13-17, 19-30, 35-36, are 39-41 above and in view of **Schuetze** (U.S. Patent 5,675,819).

Regarding claim 10, **Wheeler** and **Chakrabarti** do not explicitly teach wherein the set of terms includes singular terms and higher order terms.

**Schuetze**, however, teaches wherein the set of terms includes singular terms and higher order terms (col. 13, lines 5-21).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because

Schuetze's teaching would have allowed Wheeler- Chakrabarti's to assign the ranking for relevant terms more effectively.

7. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wheeler et al. ("Wheeler") (U.S. Patent 6,618,727 B1) in view of Chakrabarti et al. ("Chakrabarti") (U.S. Patent US 6356899 B1) as applied to claims 1-5, 7-9, 13-17, 19-30, 35-36, are 39-41 above and in view of Kirsch et al. ("Kirsch") (U.S. Patent 5,983,216).

Regarding claim 11, **Wheeler** and **Chakrabarti** do not explicitly teach wherein the set of terms includes singular terms and noun phrases.

**Kirsch,** however, teaches wherein the set of terms includes singular terms and noun phrases (claim 2, a).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Kirsch's** teaching would have allowed **Wheeler- Chakrabarti's** to apply the apply the selected single terms and noun phrases to the meta-index descriptive of the document collections to determine the cumulative rankings for the documents.

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Regarding claim 12, **Wheeler** and **Chakrabarti** do not explicitly teach wherein the set of terms includes higher order terms and proper names.

**Kirsch,** however, teaches wherein the set of terms includes higher order terms and proper names (claim 2, limitation d).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Kirsch's** teaching would have allowed **Wheeler- Chakrabarti's** to apply the apply the selected single terms and noun phrases to the meta-index descriptive of the document collections to determine the cumulative rankings for the documents.

8. Claims 18, 33, 34, 38, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wheeler et al.** ("Wheeler") (U.S. Patent 6,618,727 B1) in view of **Chakrabarti et al.** ("**Chakrabarti**") (U.S. Patent US 6356899 B1) as applied to claims 1-5, 7-9, 13-17, 19-30, are 39-41 above and in view of **Agrawal et al.** ("**Agrawal"**) (U.S. Patent 5,675,819).

Regarding claims 18, 33, 38, and 43, Wheeler and Chakrabarti do not explicitly teach wherein the non-extensible markup language document is content associated with an e-mail, content associated with a web page, or content associated with a software application.

Agrawal, however, teaches wherein the non-extensible markup language document is content associated with an e-mail, content associated with a web page, or content associated with a software application (col. 1, lines 13-25).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because Agrawal's teaching involves organizing repositories of documents such as emails and web pages in folders, and the folders can be arranged in a tree-like hierarchy structure would have allowed Wheeler- Chakrabarti's to process variety types of documents in order to provide a more flexible system for user to manage and organize documents in an easy and effective manner.

Regarding claim 34, **Wheeler** and **Chakrabarti** do not explicitly teach clearly teach wherein the active desktop window is running an e-mail application.

Agrawal, however, teaches wherein the active desktop window is running an e-mail application (col. 4, lines 14-22).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because Agrawal's teaching would have allowed Wheeler- Chakrabarti's to have a means to collect and process variety types of unstructured or semi-structured documents.

9. Claims 31, 32, 37, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wheeler et al.** ("Wheeler") (U.S. Patent 6,618,727 B1) in view of

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Chakrabarti et al. ("Chakrabarti") (U.S. Patent US 6356899 B1) as applied to claims 1-5, 7-9, 13-17, 19-30, are 39-41 above and in view of **Jeffrey** (US 20030084040A1).

Regarding claims 31, 32, 37, and 42, **Wheeler** and **Chakrabarti** do not explicitly teach wherein the probabilistic algorithm uses a Bayesian model.

**Jeffrey**, however, teaches wherein the probabilistic algorithm uses a Bayesian model (paragraph 19).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because Jeffrey's teaching involves document retrieval for wide ranges of subject matter, such as exhibited by the Internet, general libraries, and other broad-coverage information collections and comparing documents includes segmenting a judgment matrix into a plurality of information sub-matrices where each sub-matrix has a plurality of classifications and a plurality of terms relevant to each classification would have allowed Wheeler- Chakrabarti's to effectively calculate the probability of the relevant terms for the target documents in order to produce more accurate results.

# Response to Arguments

10. Applicant's arguments with respect to claims 1-43 have been considered but are most in view of the new ground(s) of rejection.

Applicant argues that Wheeler does not even disclose the generation of a list of one or more related documents ranked upon relevance to a first representation of

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content. Wheeler merely discloses the generating of report results in general. There is no disclosure of the report results being presented in the form a of list of ranked documents relevant to a first representation of content. Wheeler also does not teach generating a link to each of the one or more related documents.

In response to the preceding arguments, Examiner respectfully submits that it is recognized that Wheeler does not explicitly teach the above features, as a result,

Chakrabarti is applied to addressed to argued limitations in this Office Action. And Pitkow was cited in the previous Office Action dated August 4, 2006 to address these limitations.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie Wong whose telephone number is (571) 272
4120. The examiner can normally be reached on Monday to Friday 9:30am - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHARLES RONES can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Leslie Wong

**Primary Patent Examiner** 

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LW January 17, 2007